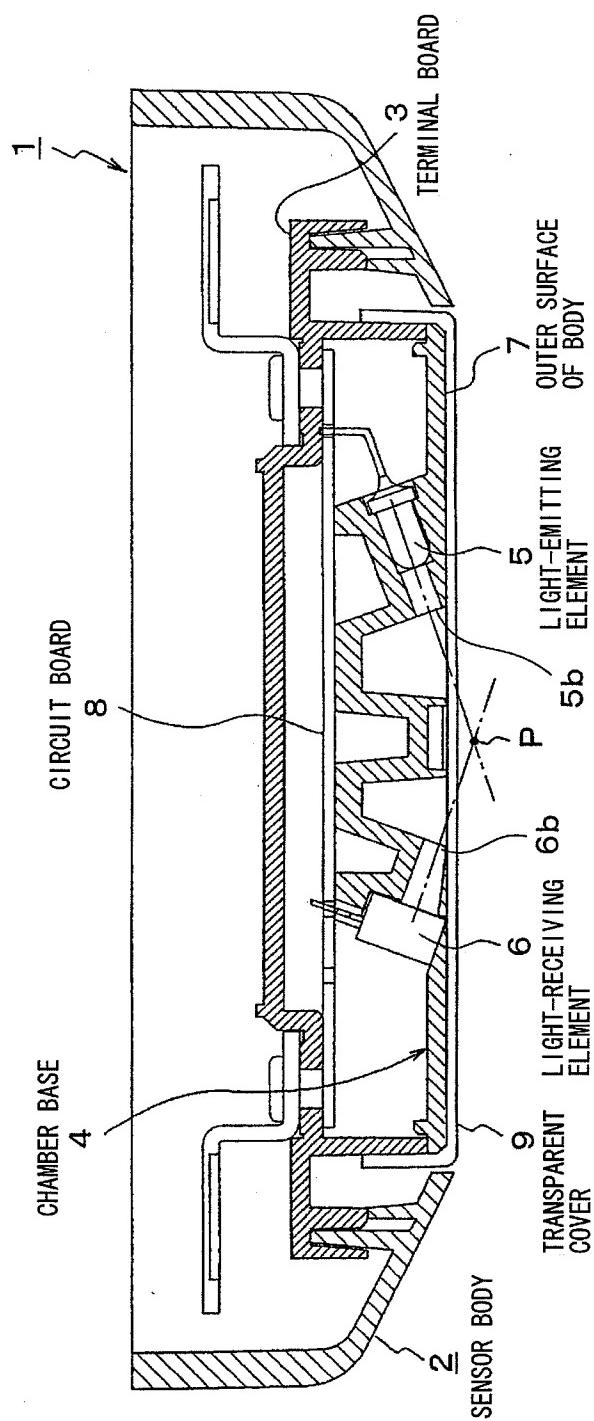
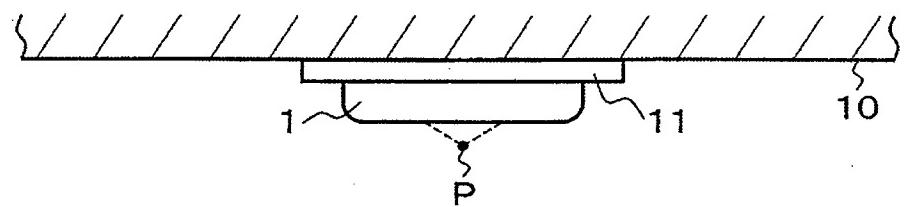


FIG. 1



F I G . 2 A



5

F I G . 2 B

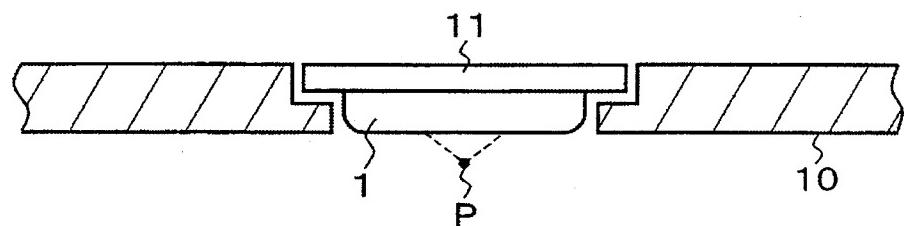


FIG. 3

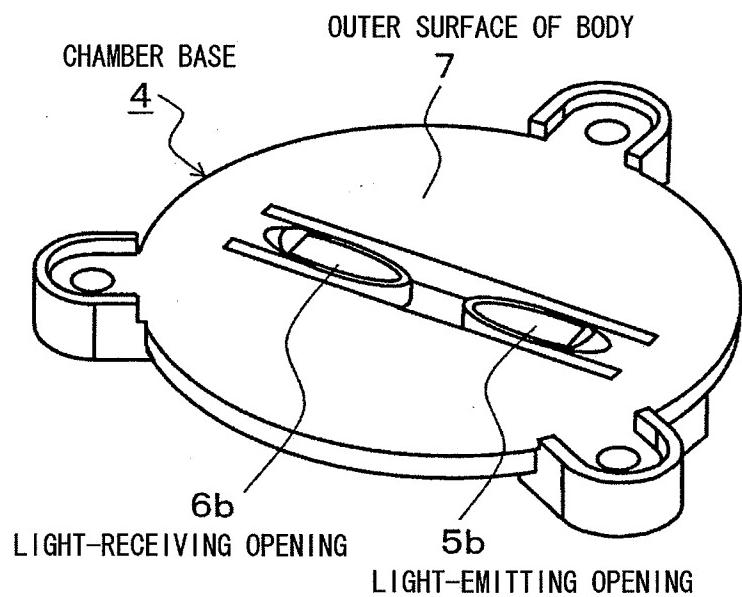
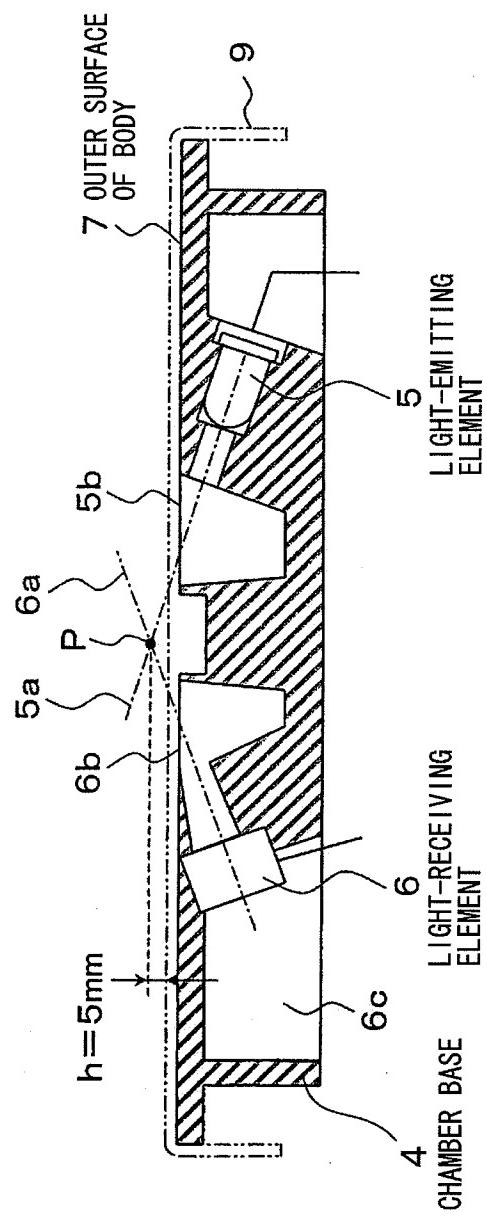
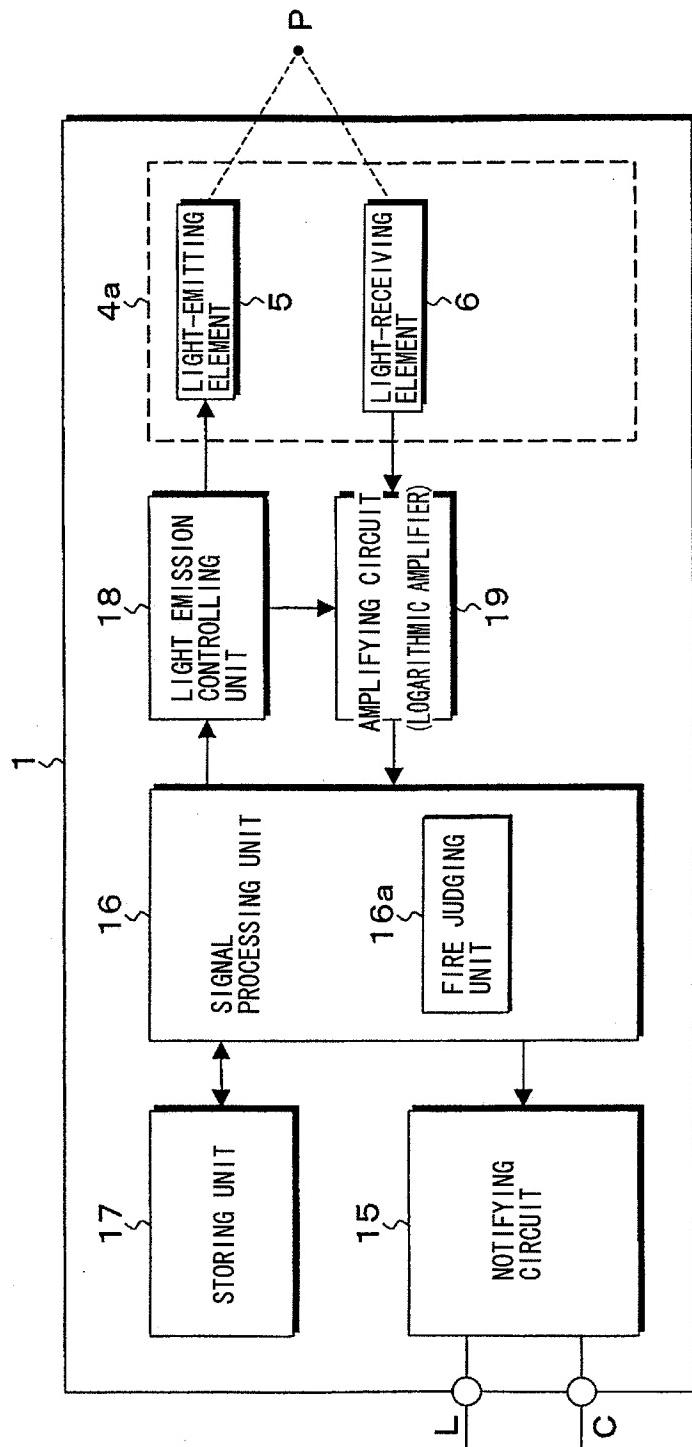


FIG. 4



F I G . 5



F I G . 6

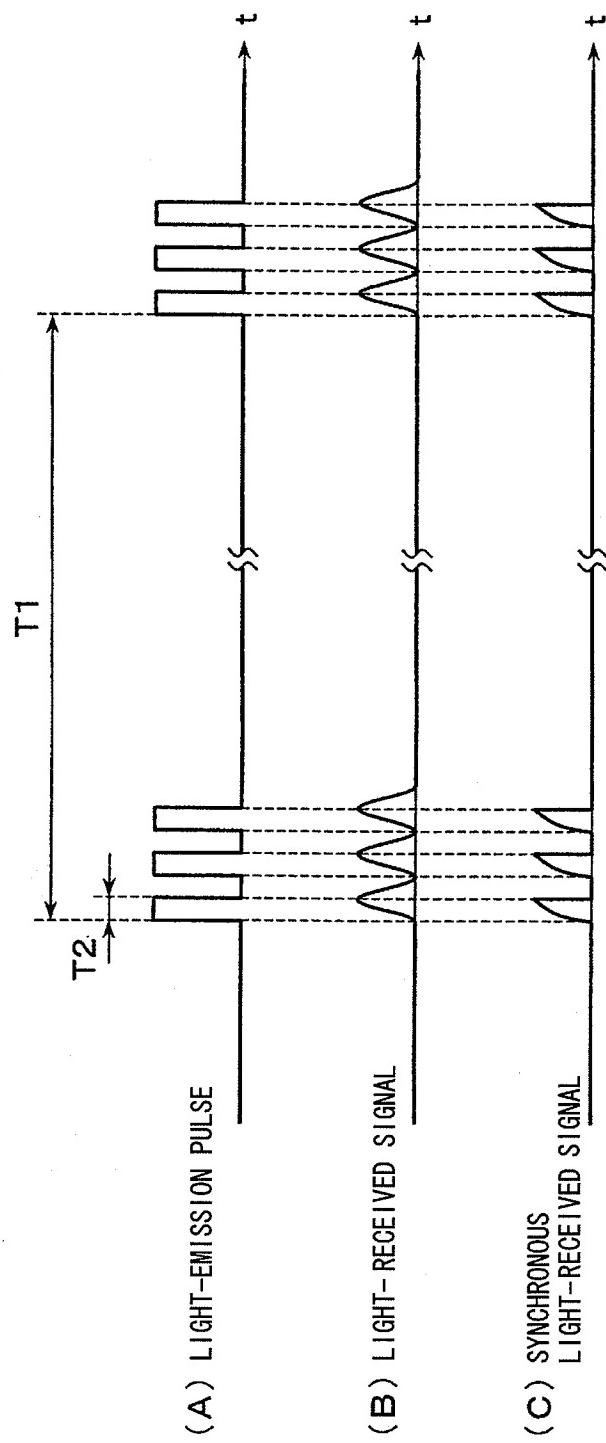
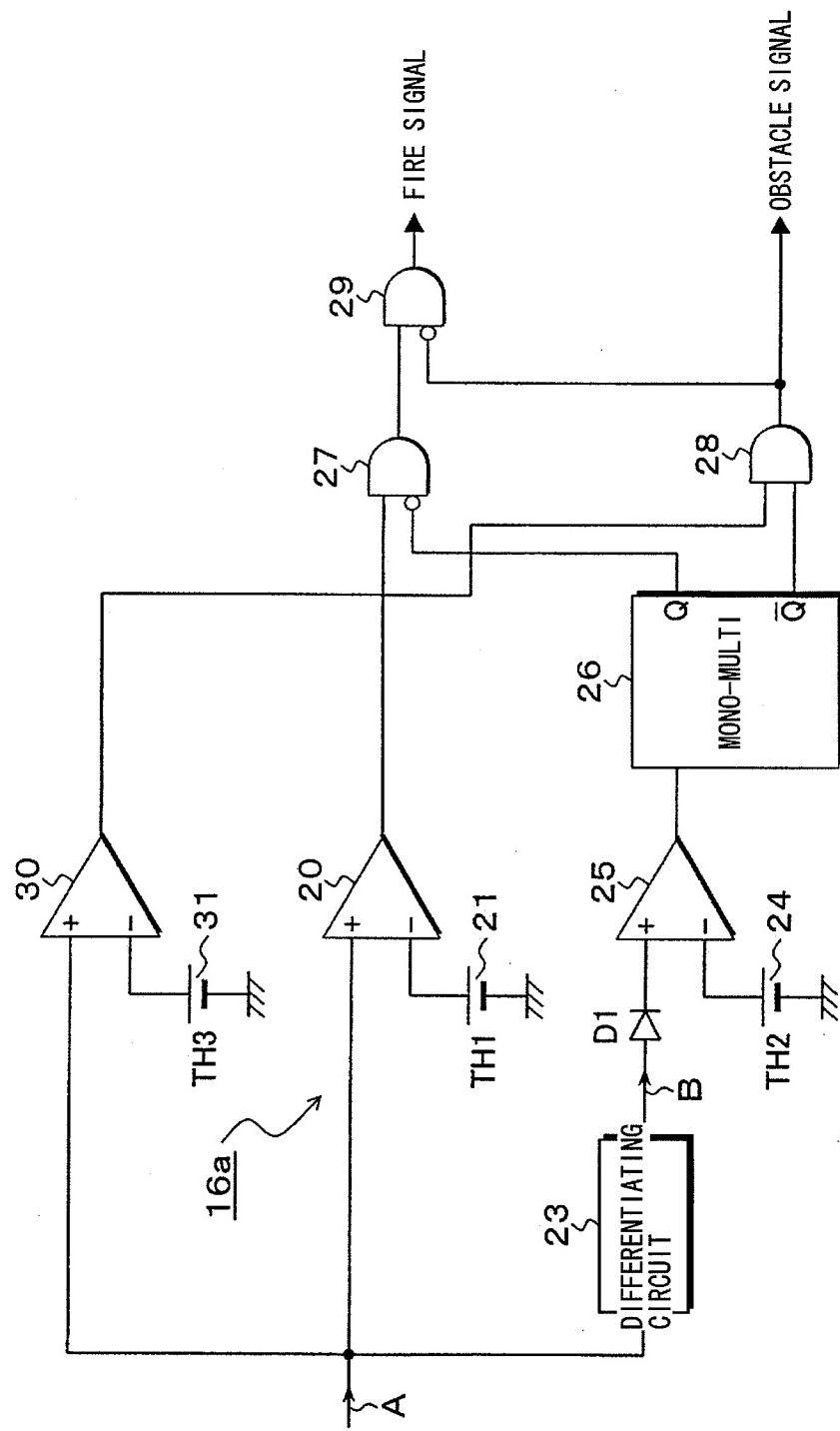
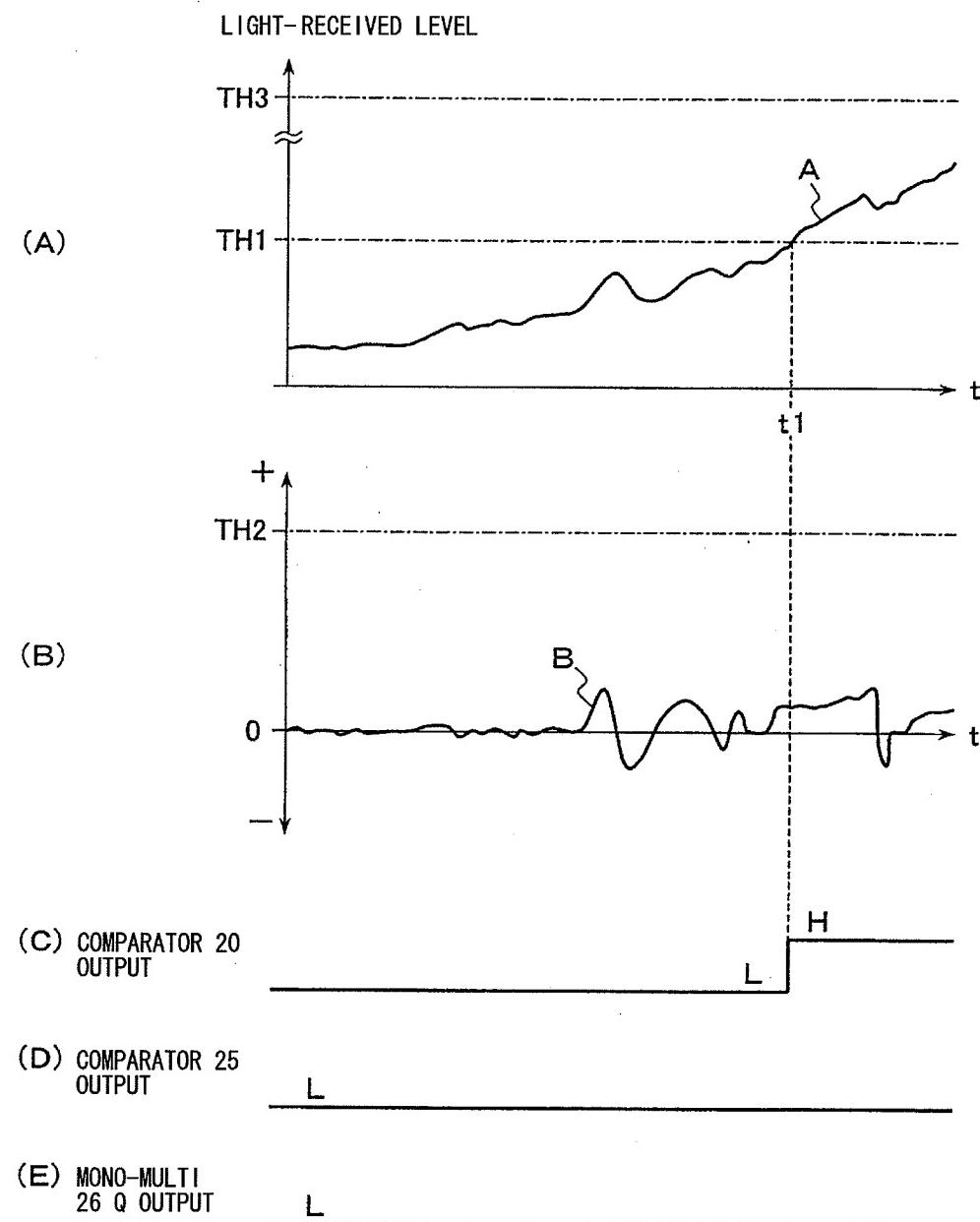


FIG. 7

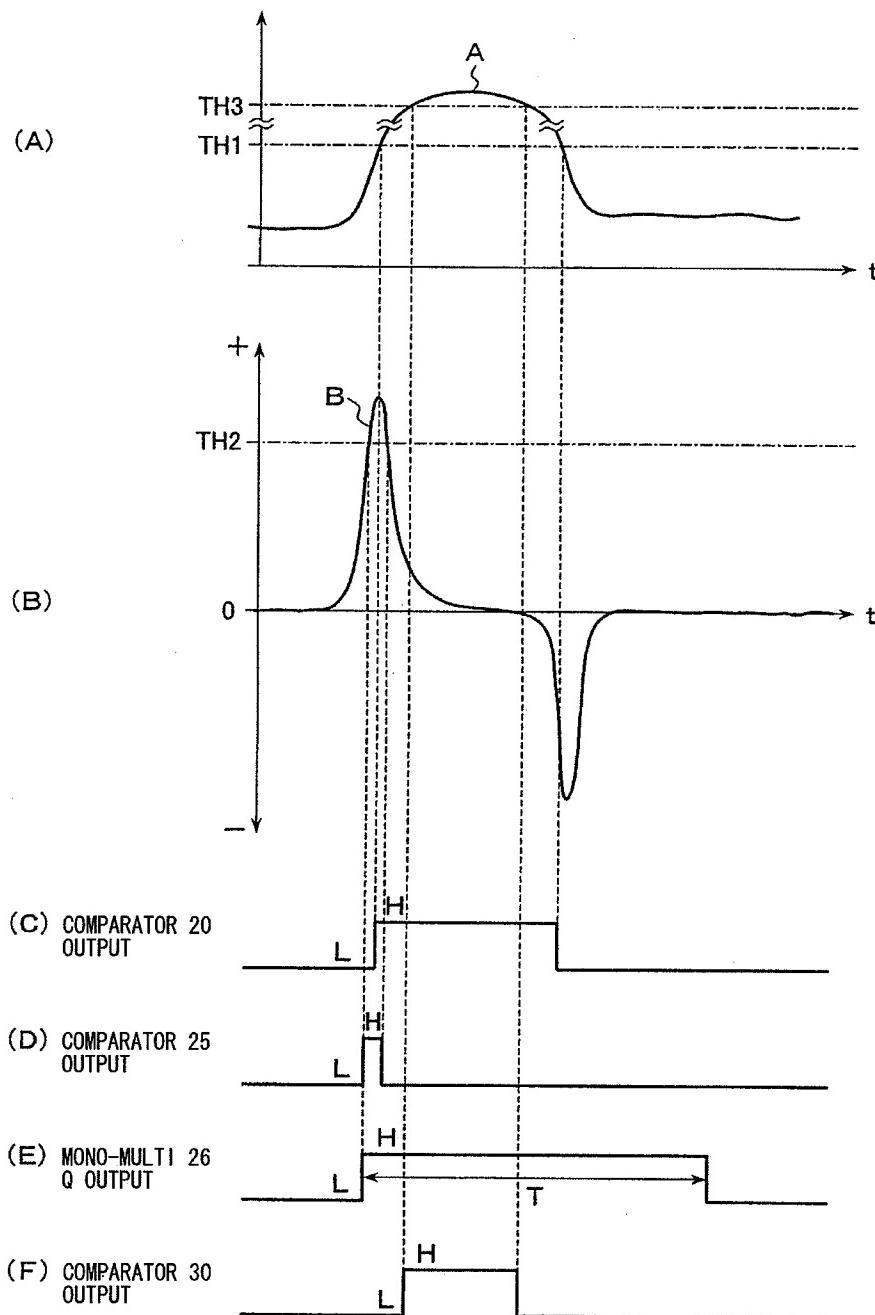


F I G . 8



F I G . 9

LIGHT- RECEIVED LEVEL



F I G . 1 0

LIGHT-RECEIVED LEVEL

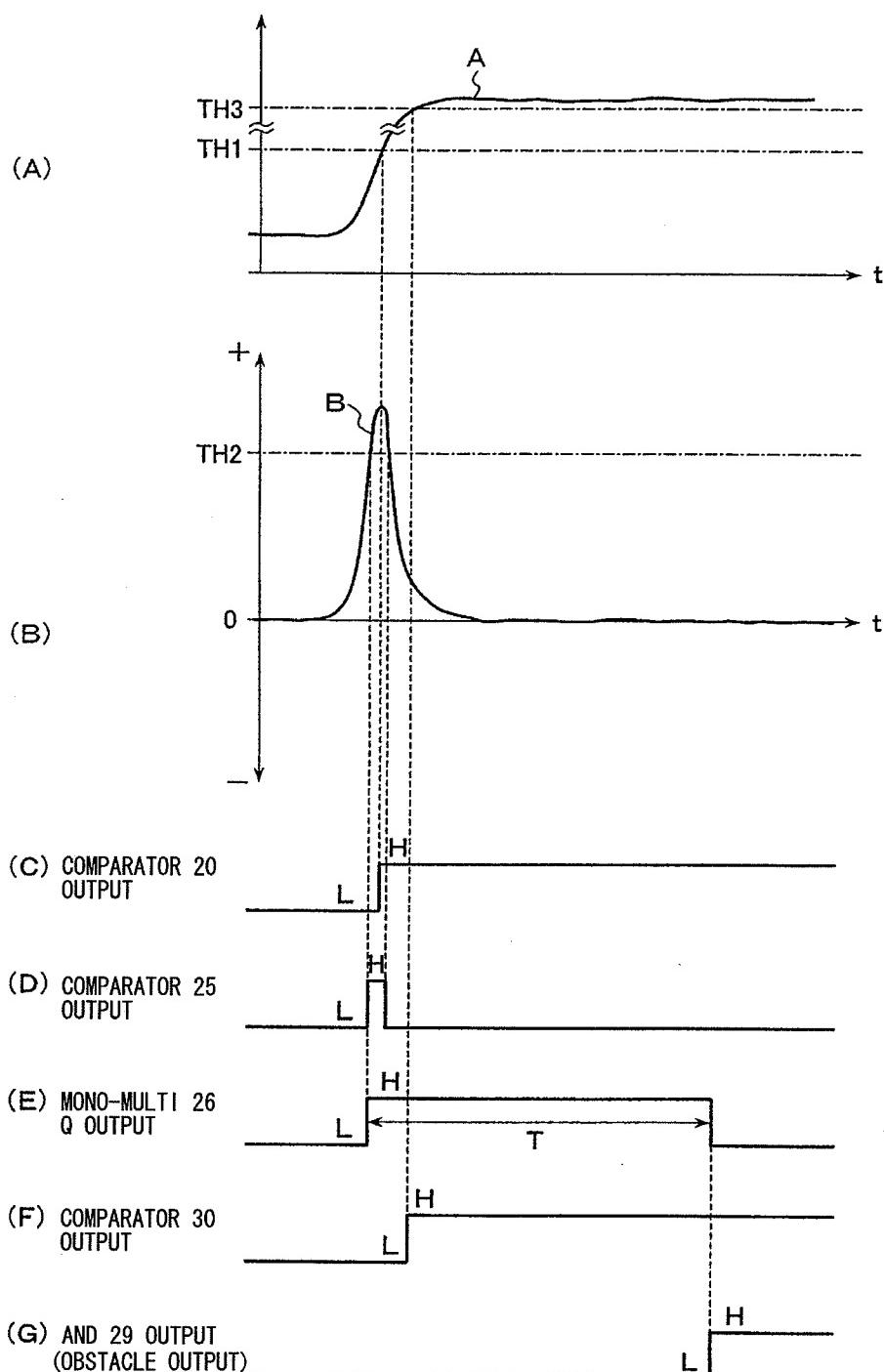
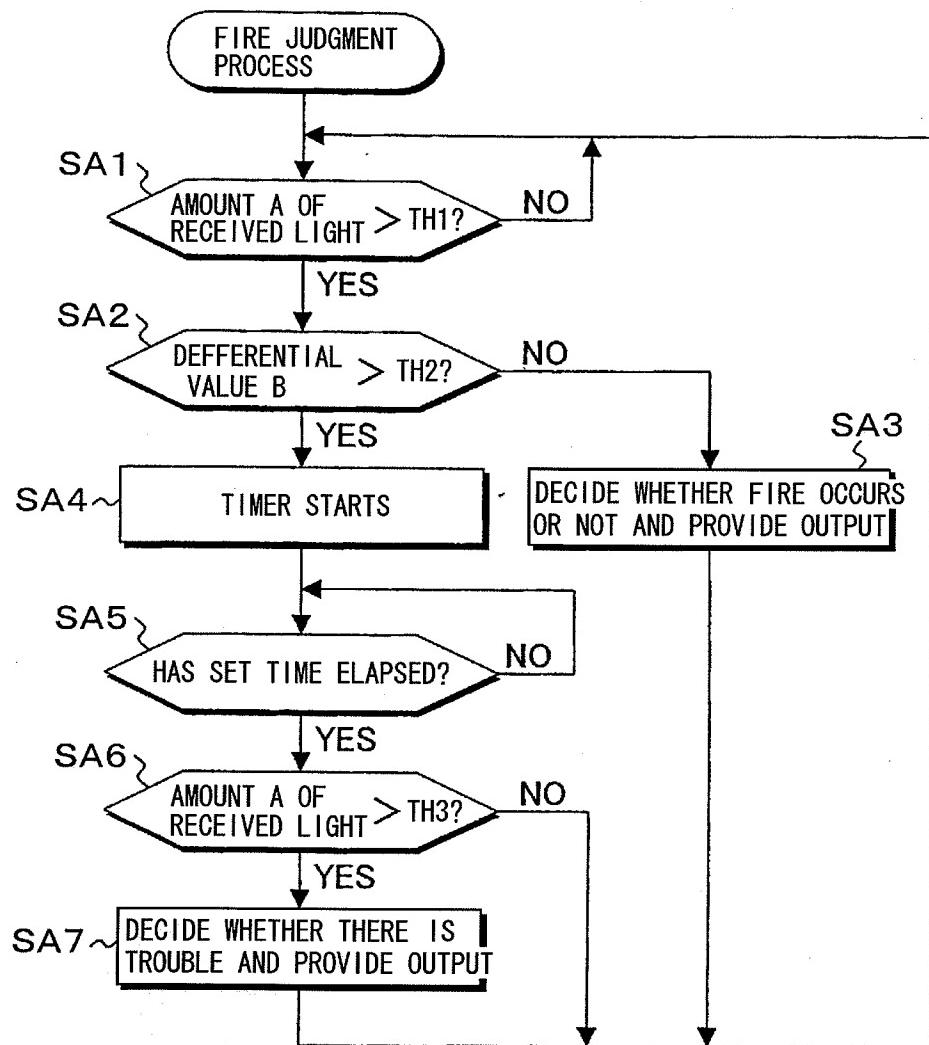
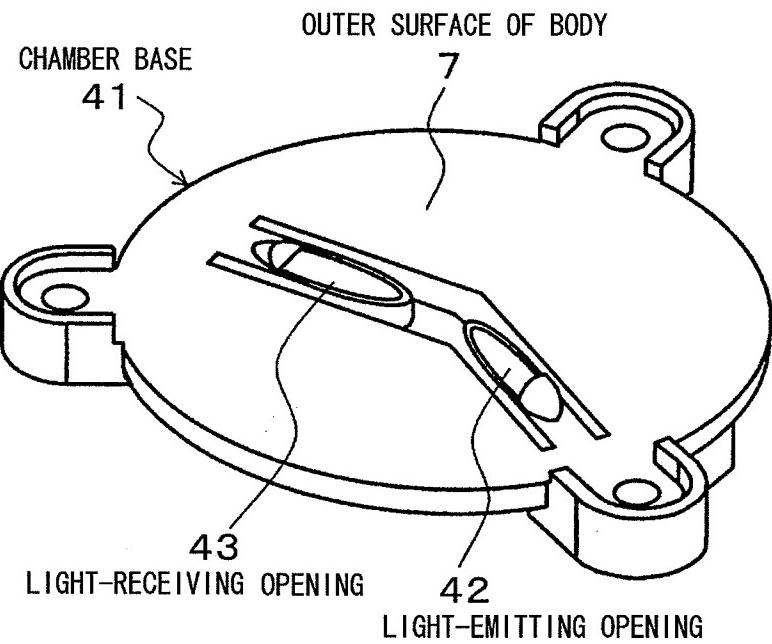


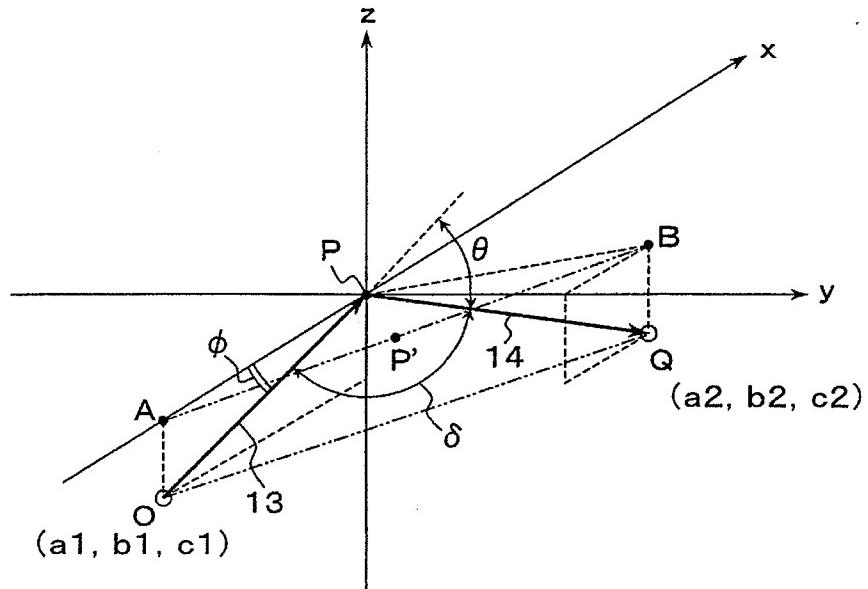
FIG. 11



F I G . 1 2



F I G . 1 3 A



5

F I G . 1 3 B

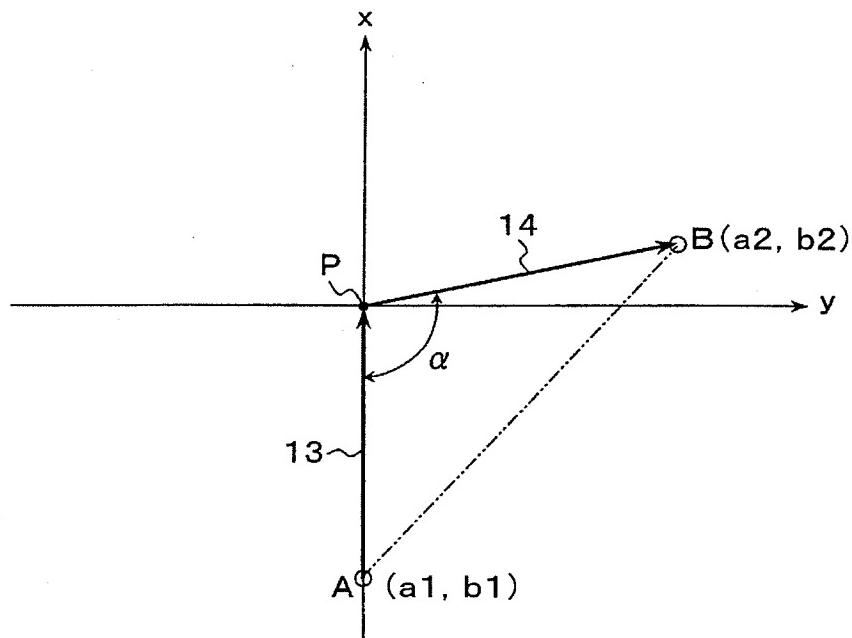
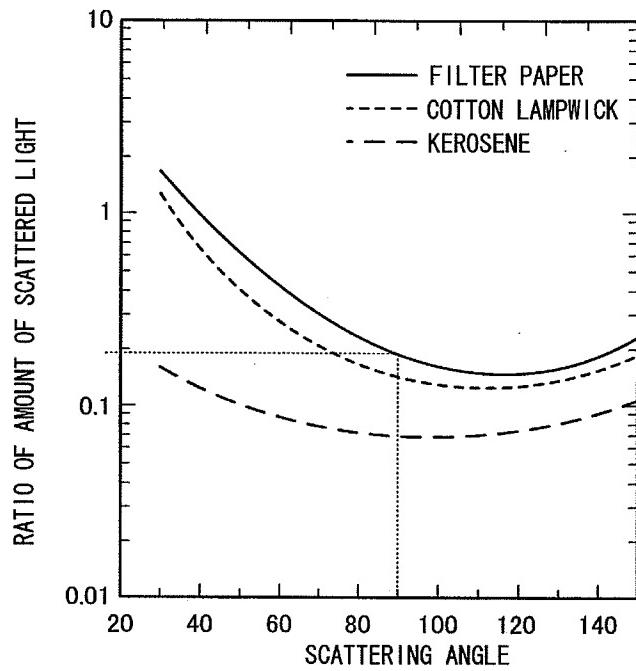


FIG. 14



5

FIG. 15

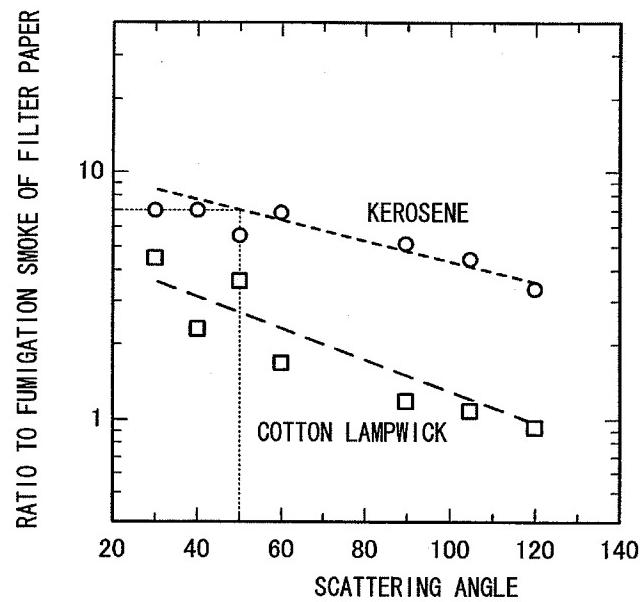


FIG. 16

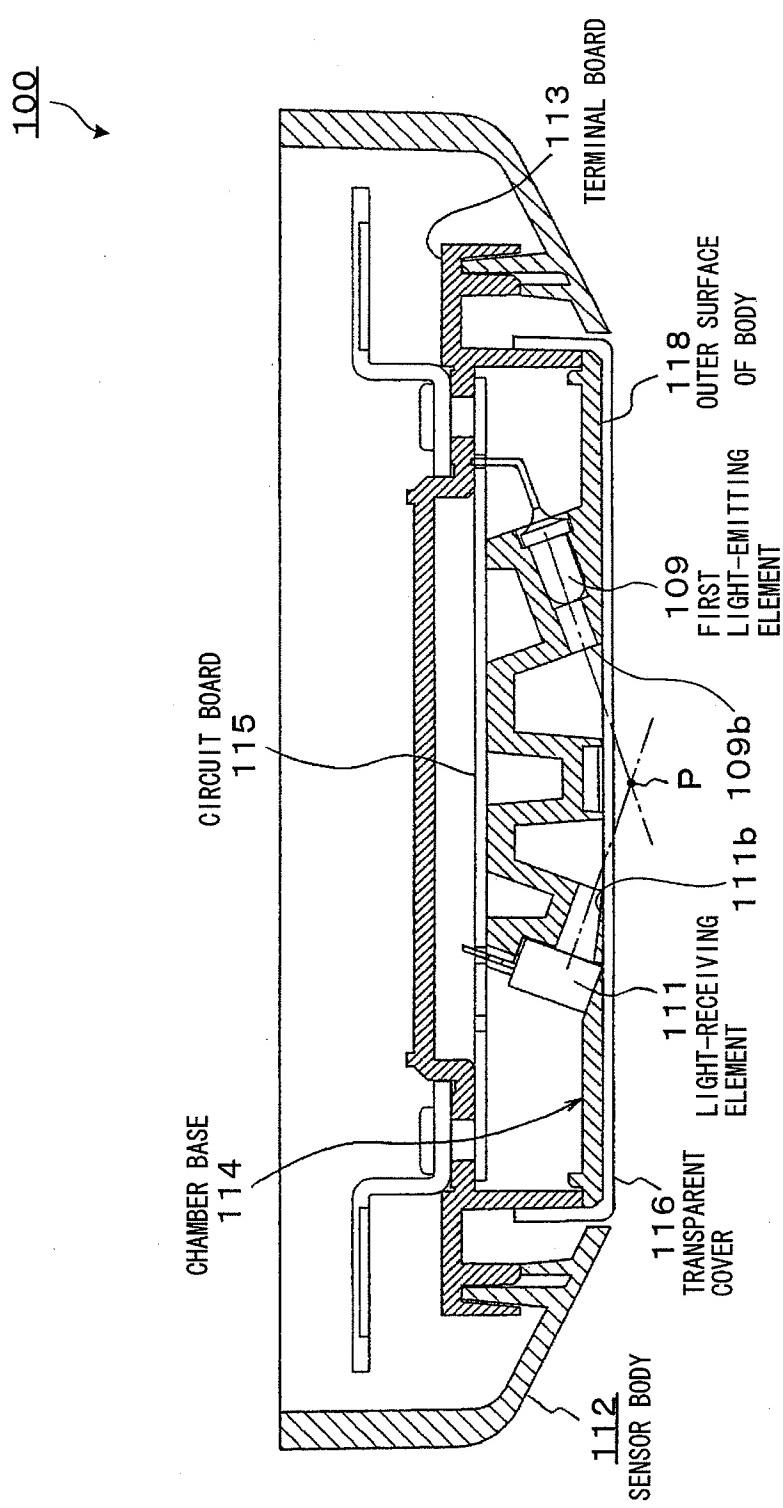


FIG. 17

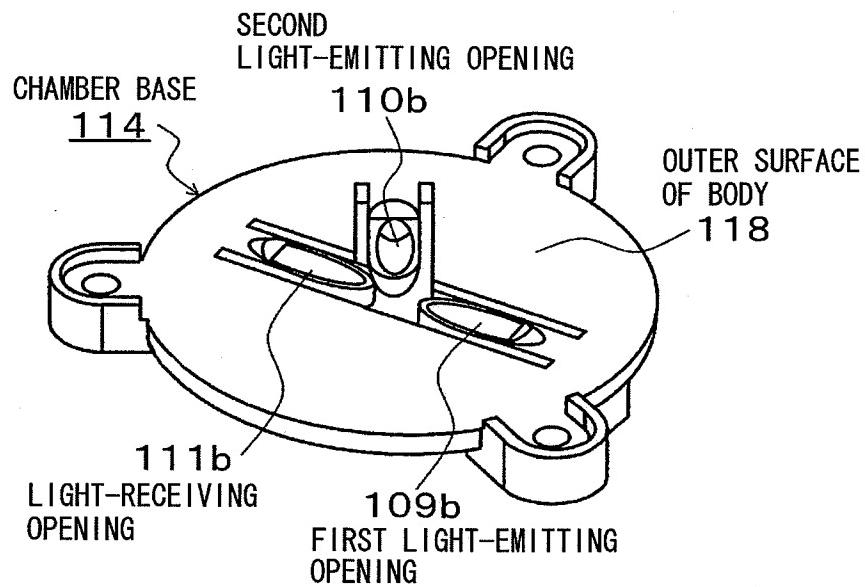
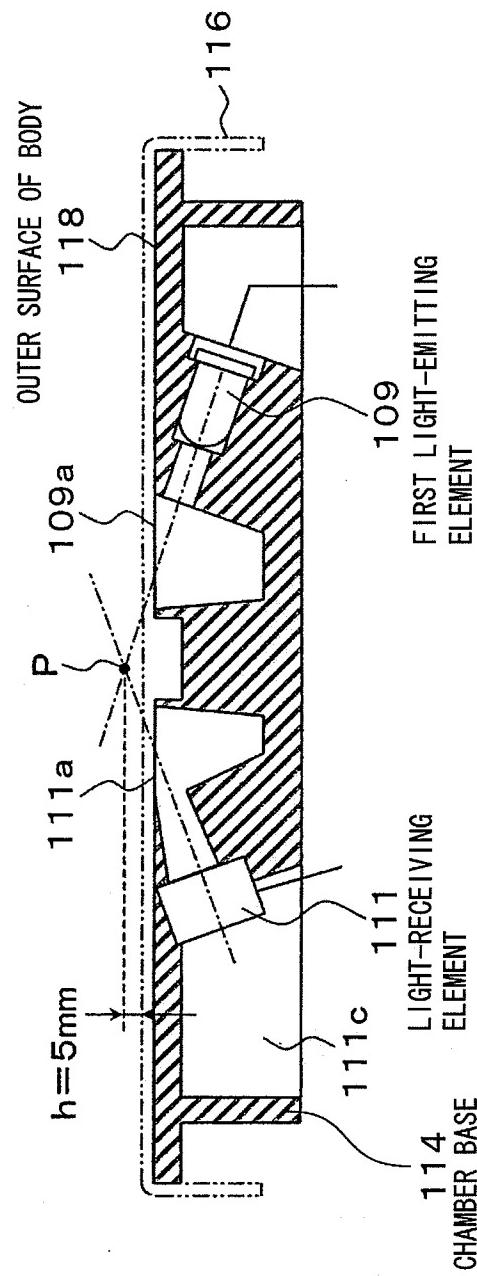


FIG. 18



F I G . 1 9

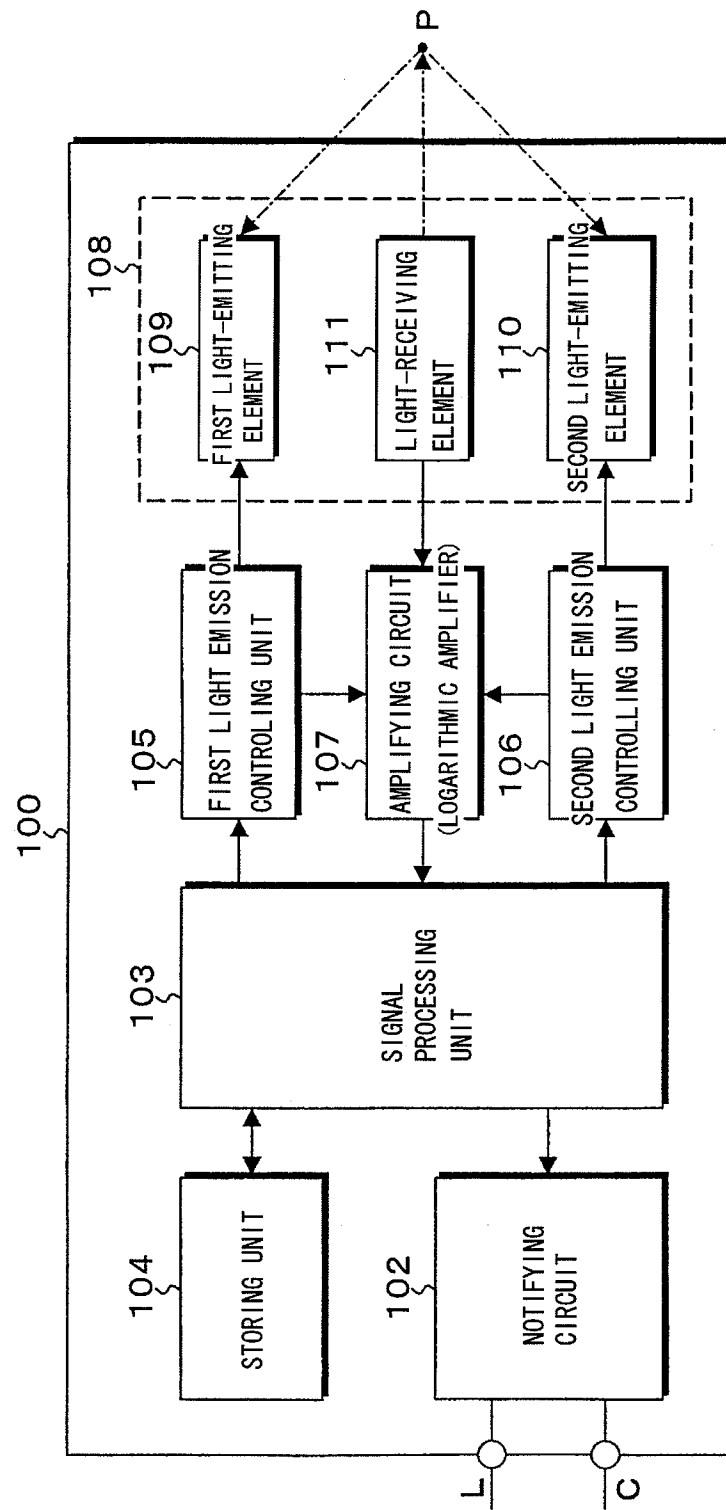
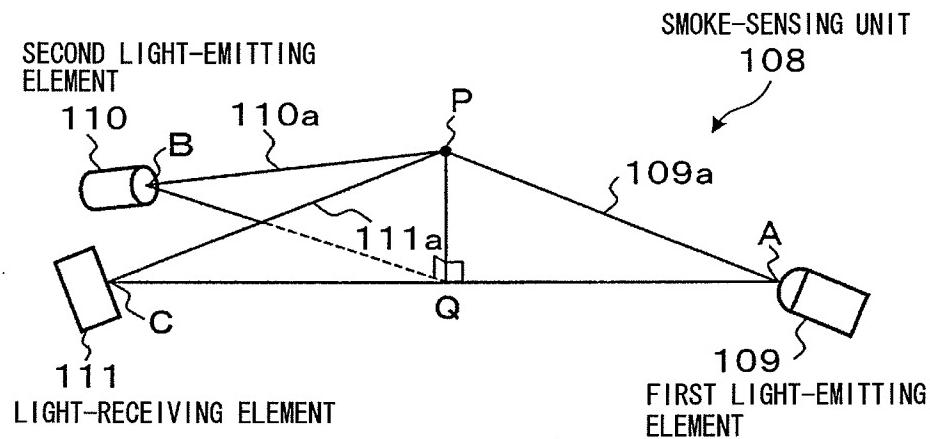


FIG. 20 A



5

FIG. 20 B

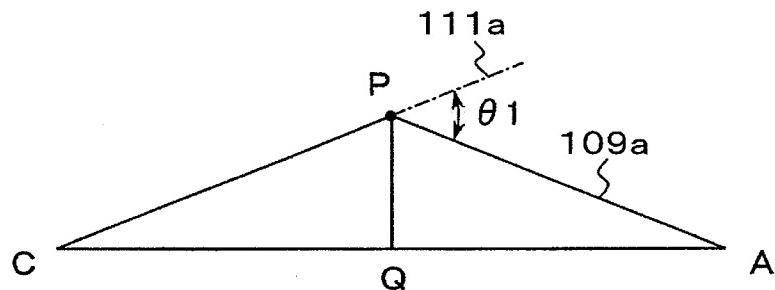
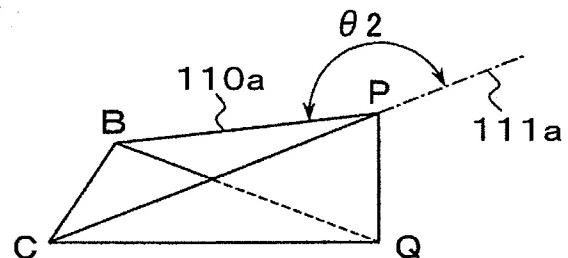
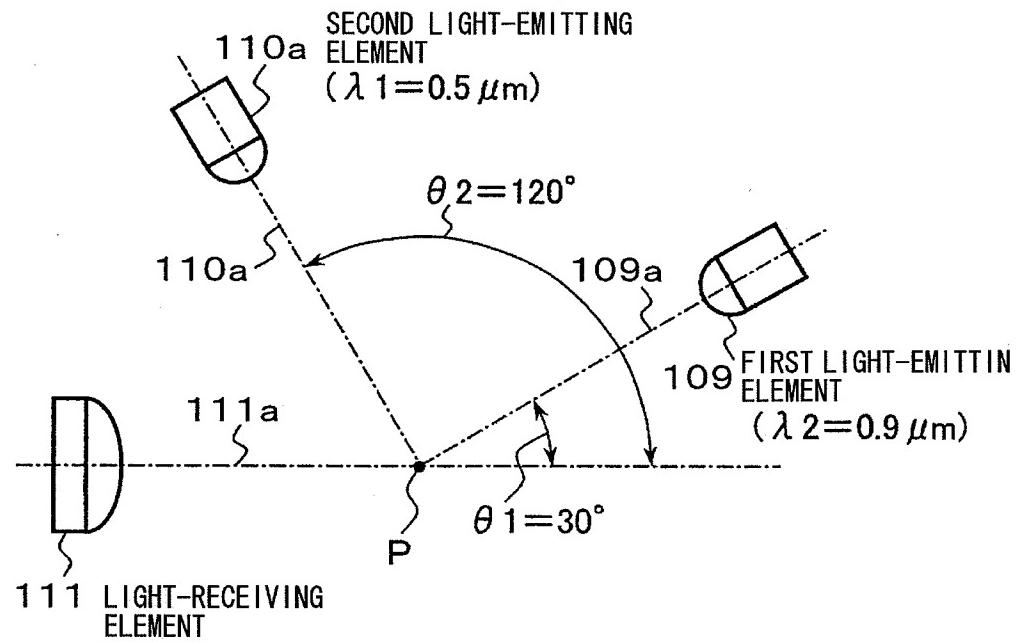


FIG. 20 C



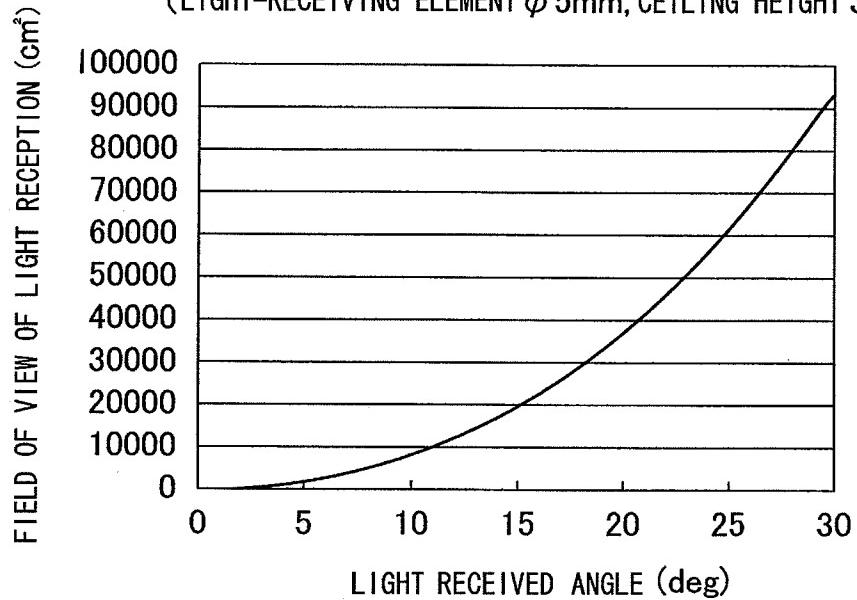
F I G . 2 1



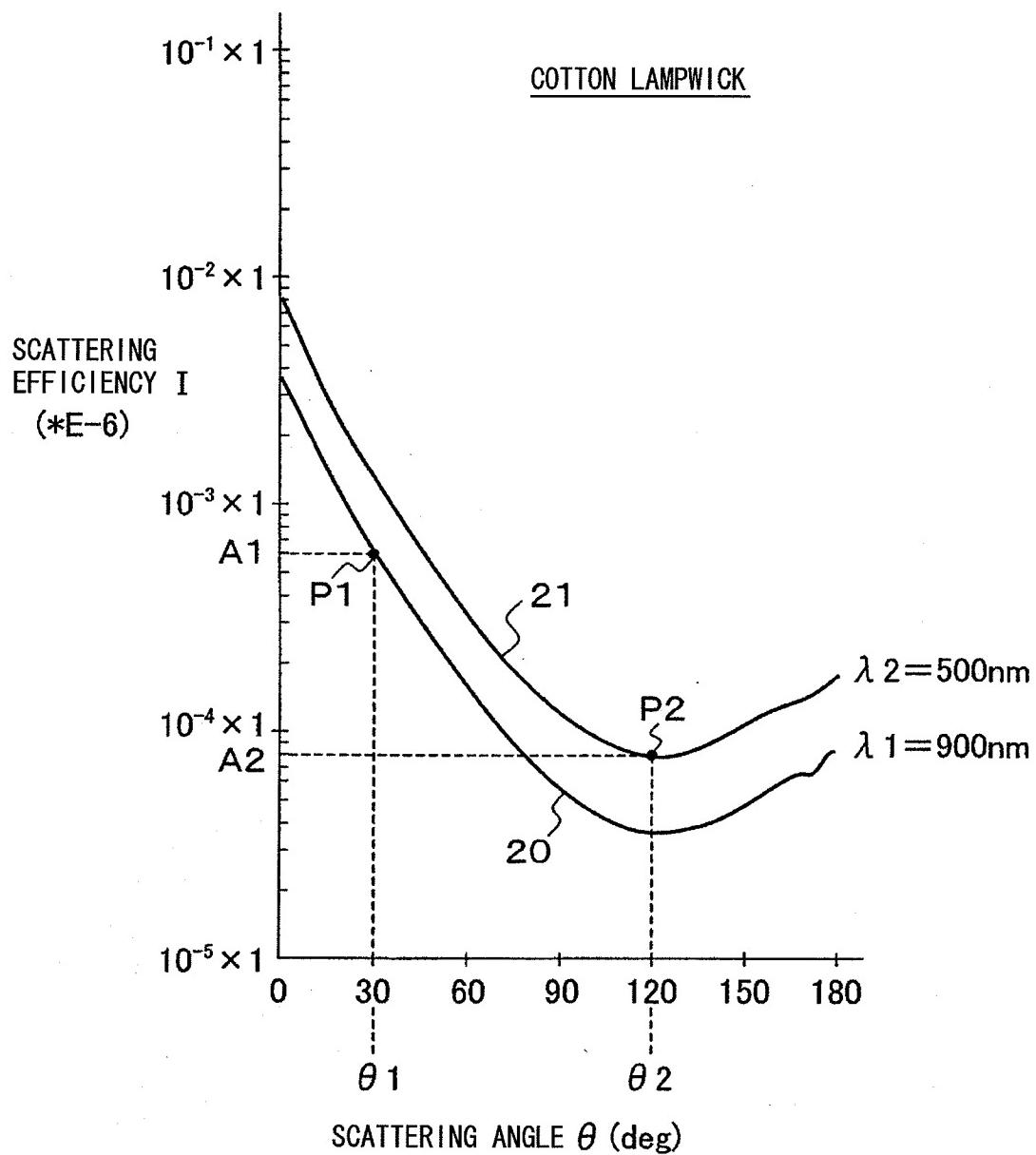
F I G . 2 2

RELATION BETWEEN LIGHT- RECEIVED
ANGLE AND ANGLE OF FIELD OF VIEW

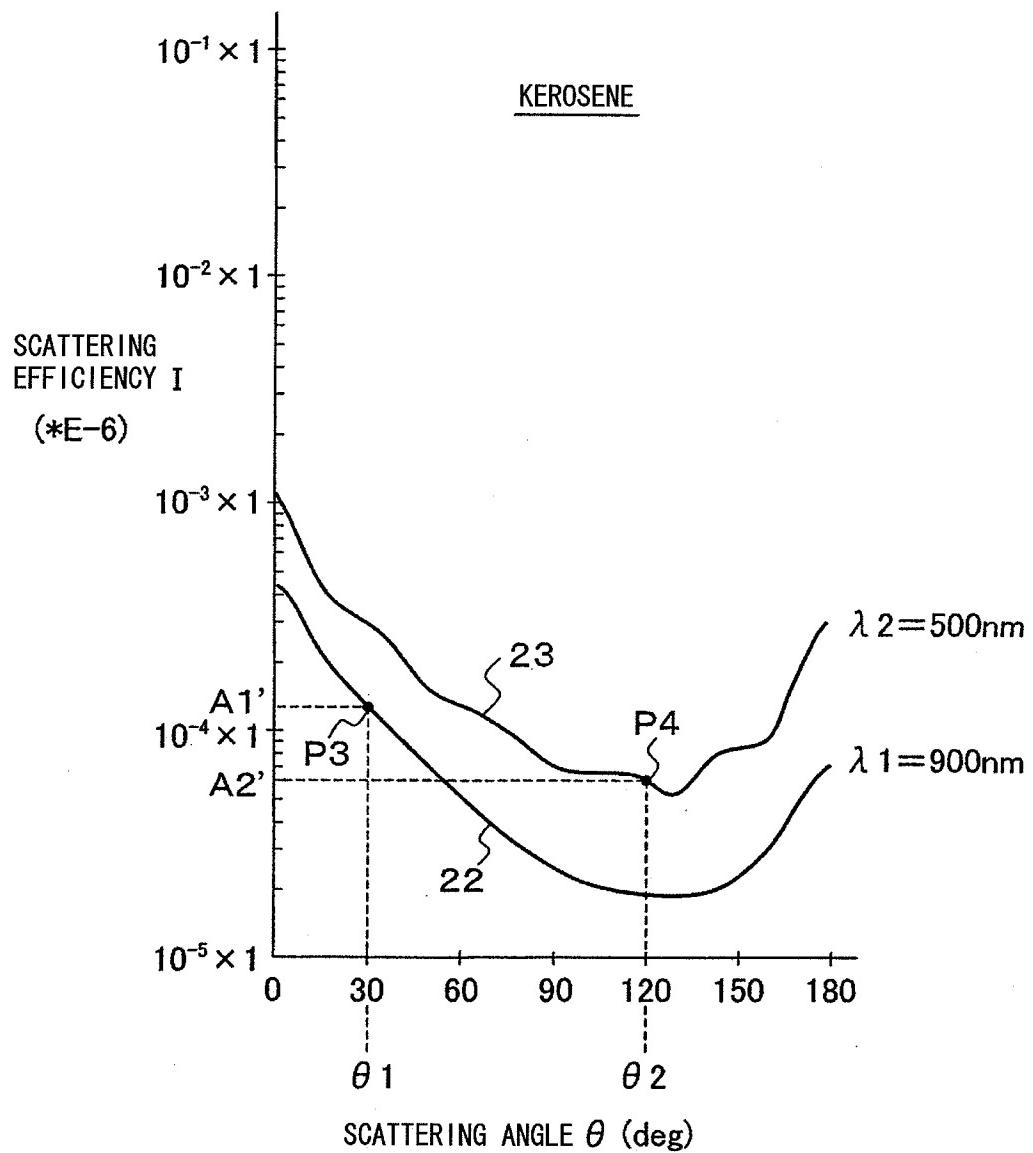
(LIGHT-RECEIVING ELEMENT ϕ 5mm, CEILING HEIGHT 3m)



F I G . 2 3



F I G . 2 4



T I G . 2 5

TYPE OF COMBUSTION MATERIAL	AMOUNT OF LIGHT RECEIVED SIGNAL A1 FOR FIRST LIGHT-EMMITING ELEMENT	AMOUNT OF LIGHT RECEIVED SIGNAL A2 FOR SECOND LIGHT EMMITTING ELEMENT	RATIO R=A1/A2
FUMIGATION SMOKE (COTTON LAMPWICK)	6.0E-04	7.5E-05	8.0
COMBUSTION SMOKE (KEROSENE)	1.2E-04	5.3E-05	2.3

FIG. 26

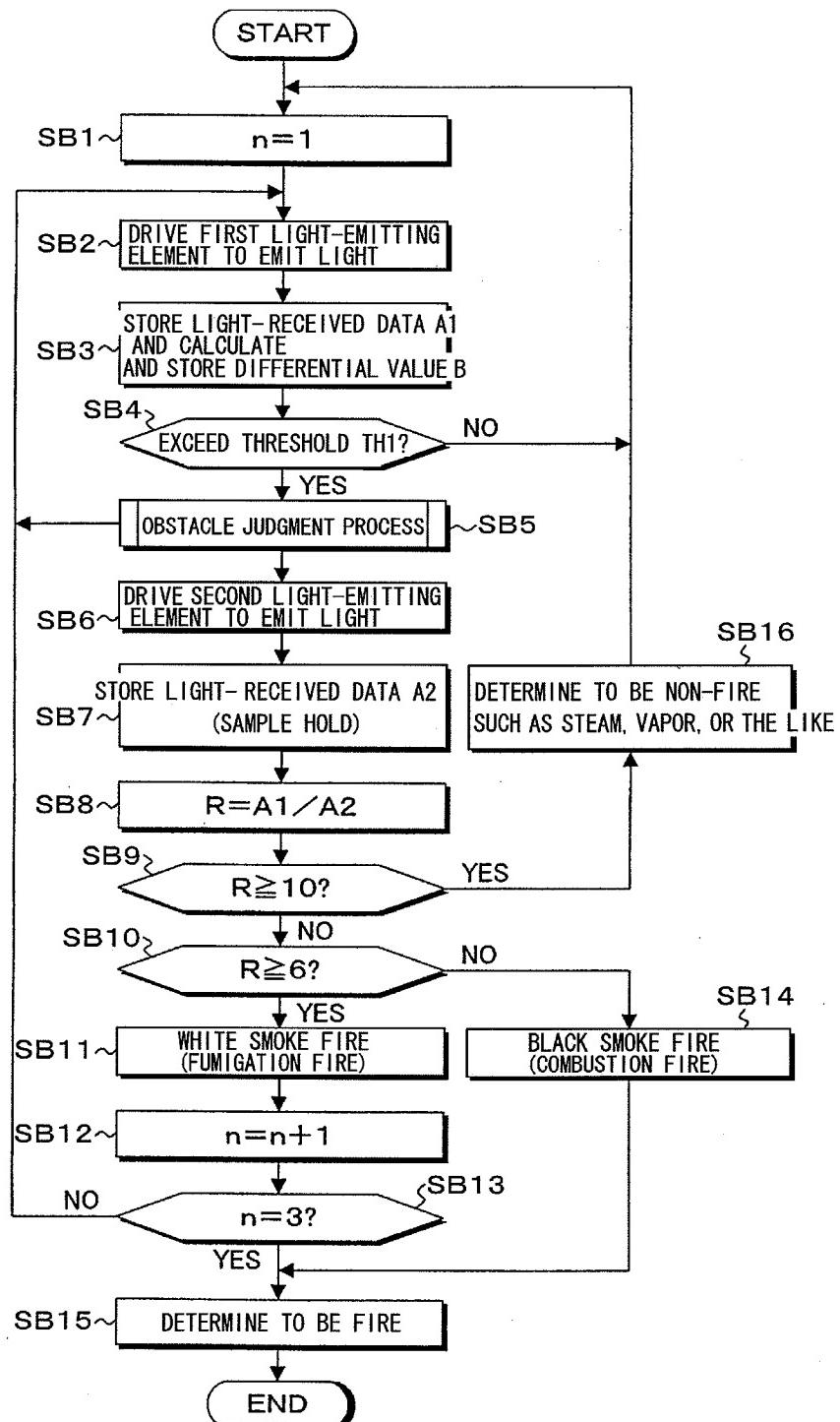


FIG. 27

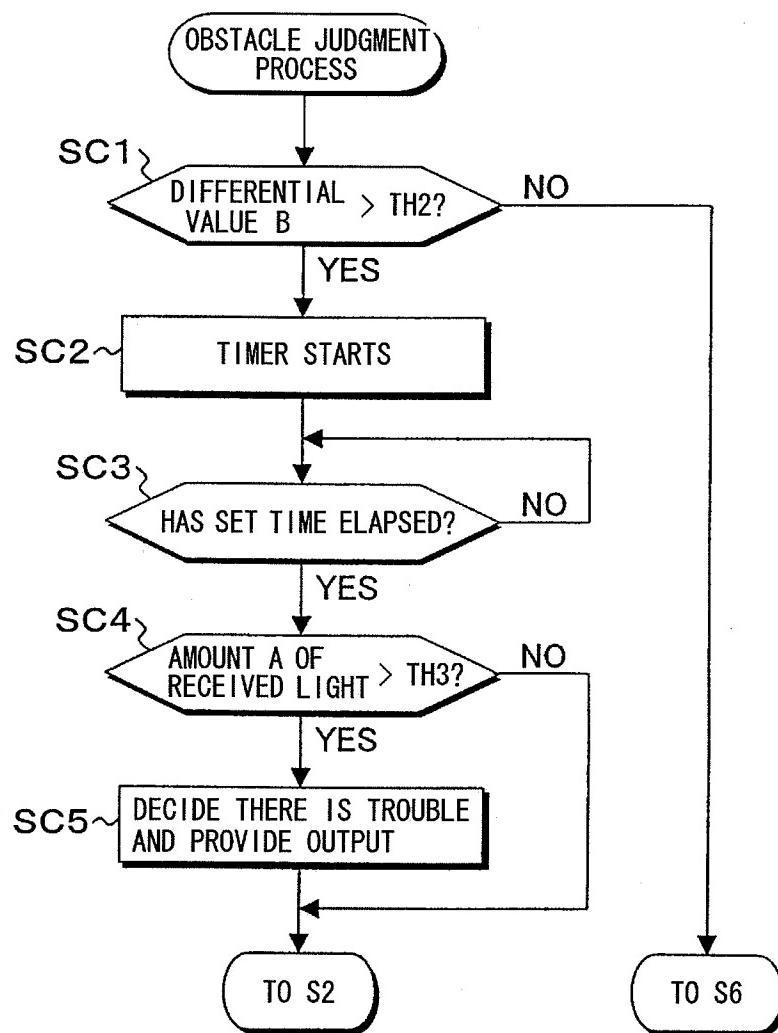


FIG. 28

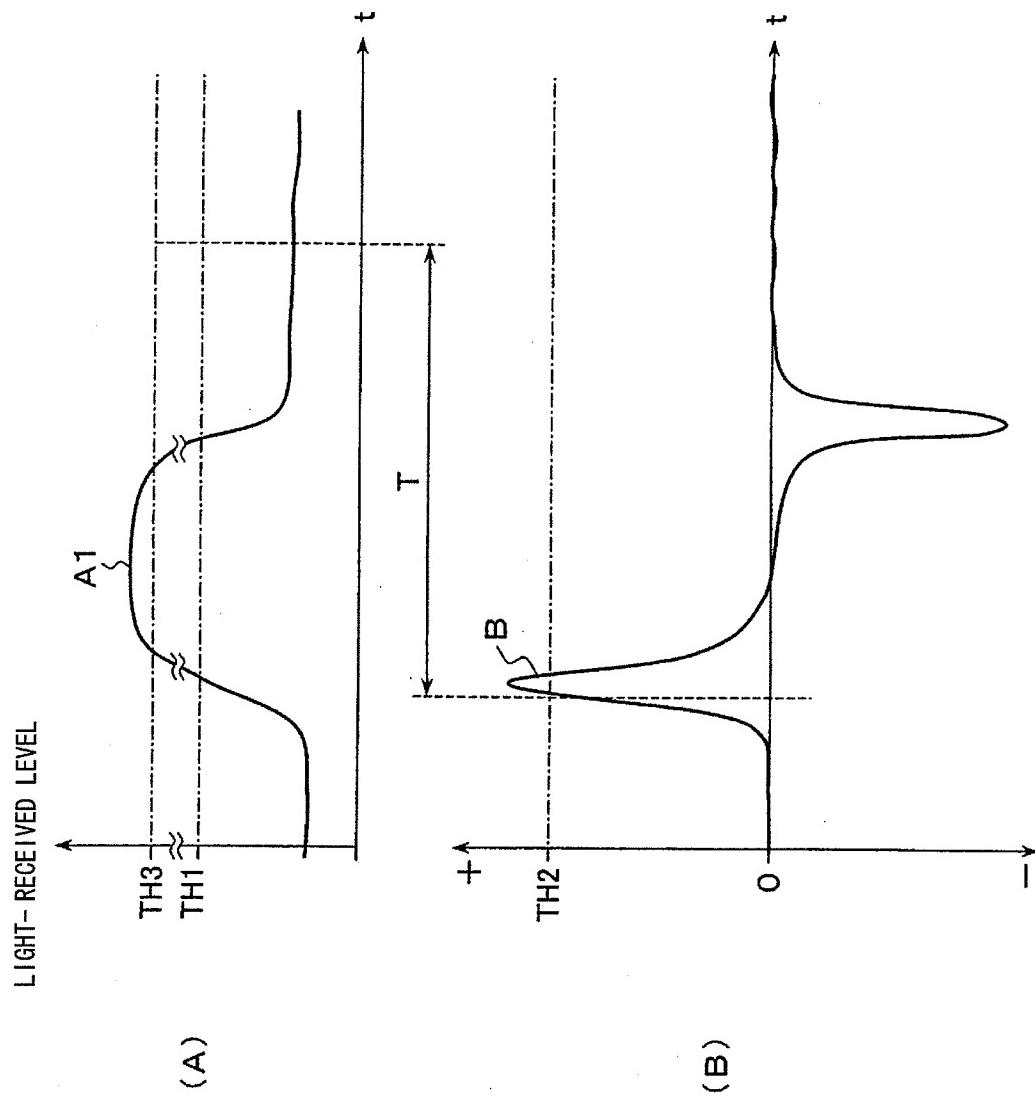


FIG. 29

LIGHT- RECEIVED LEVEL

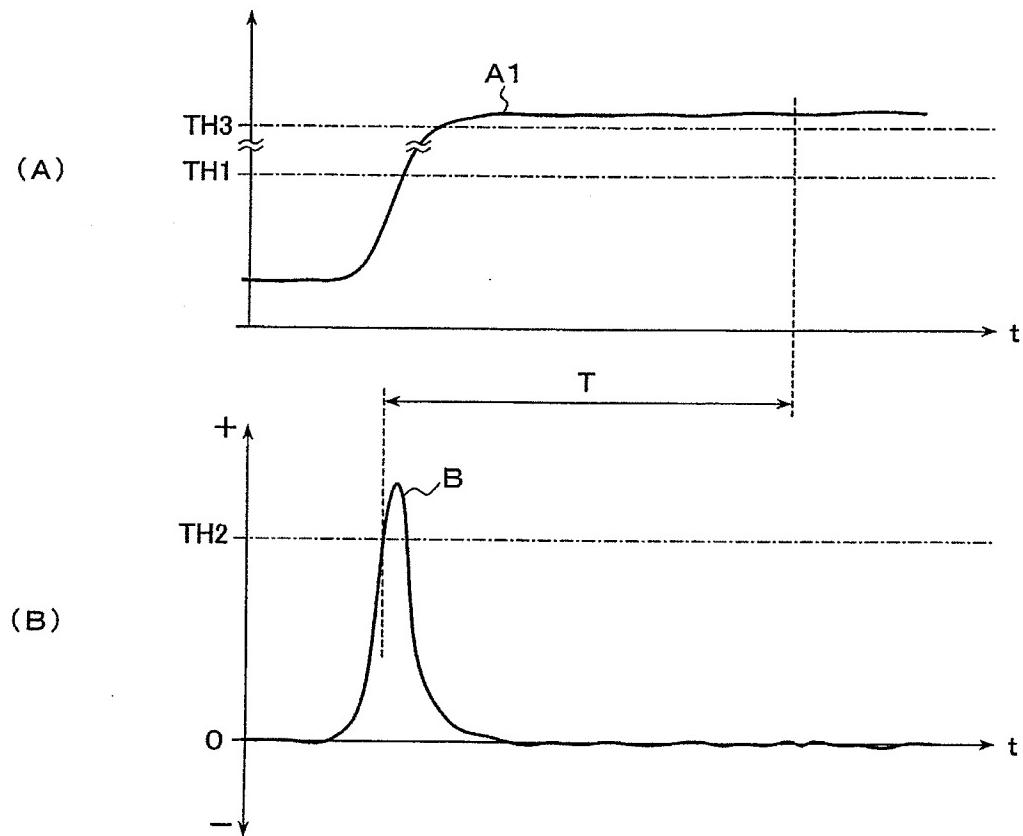


FIG. 30

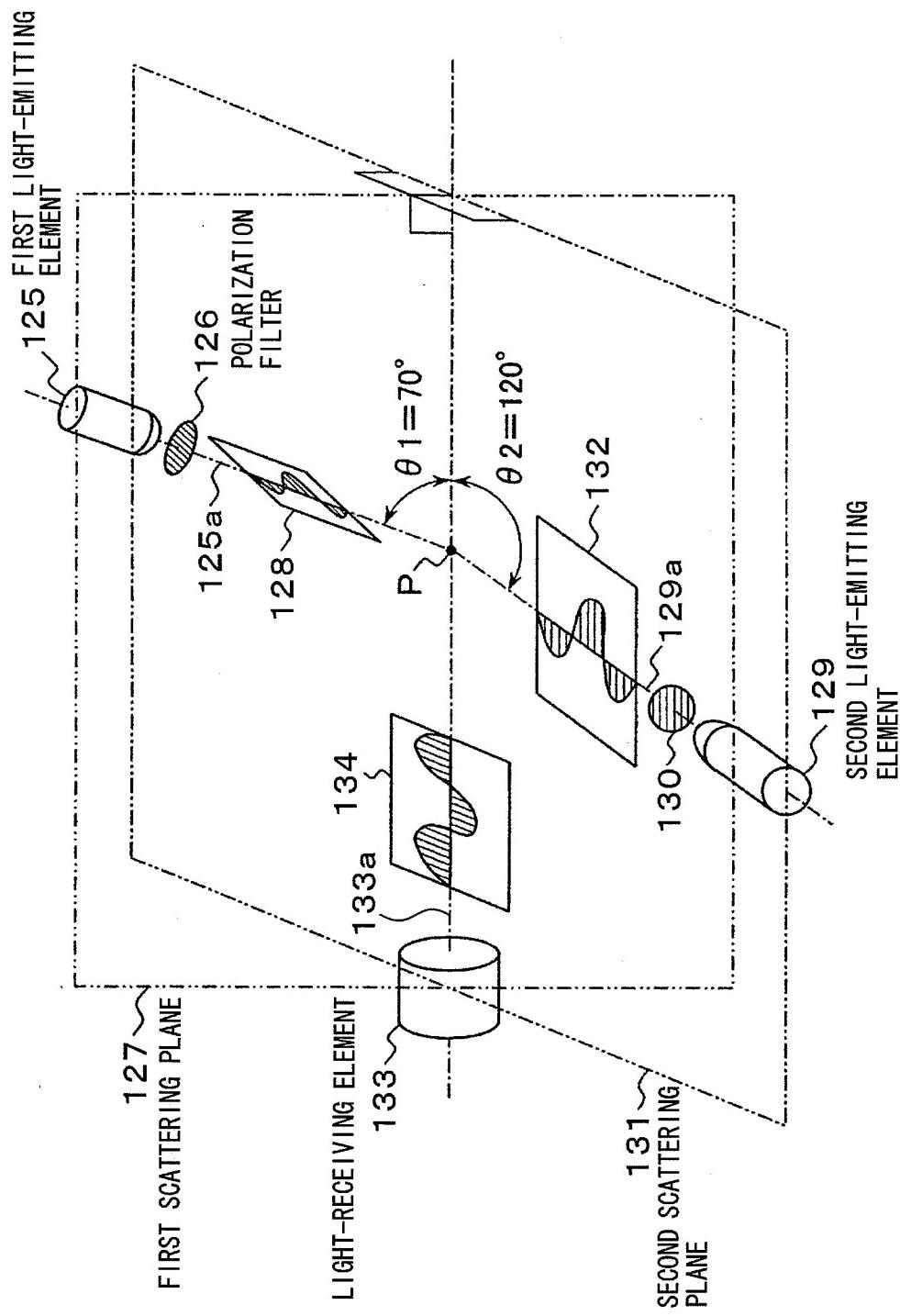


FIG. 3 1

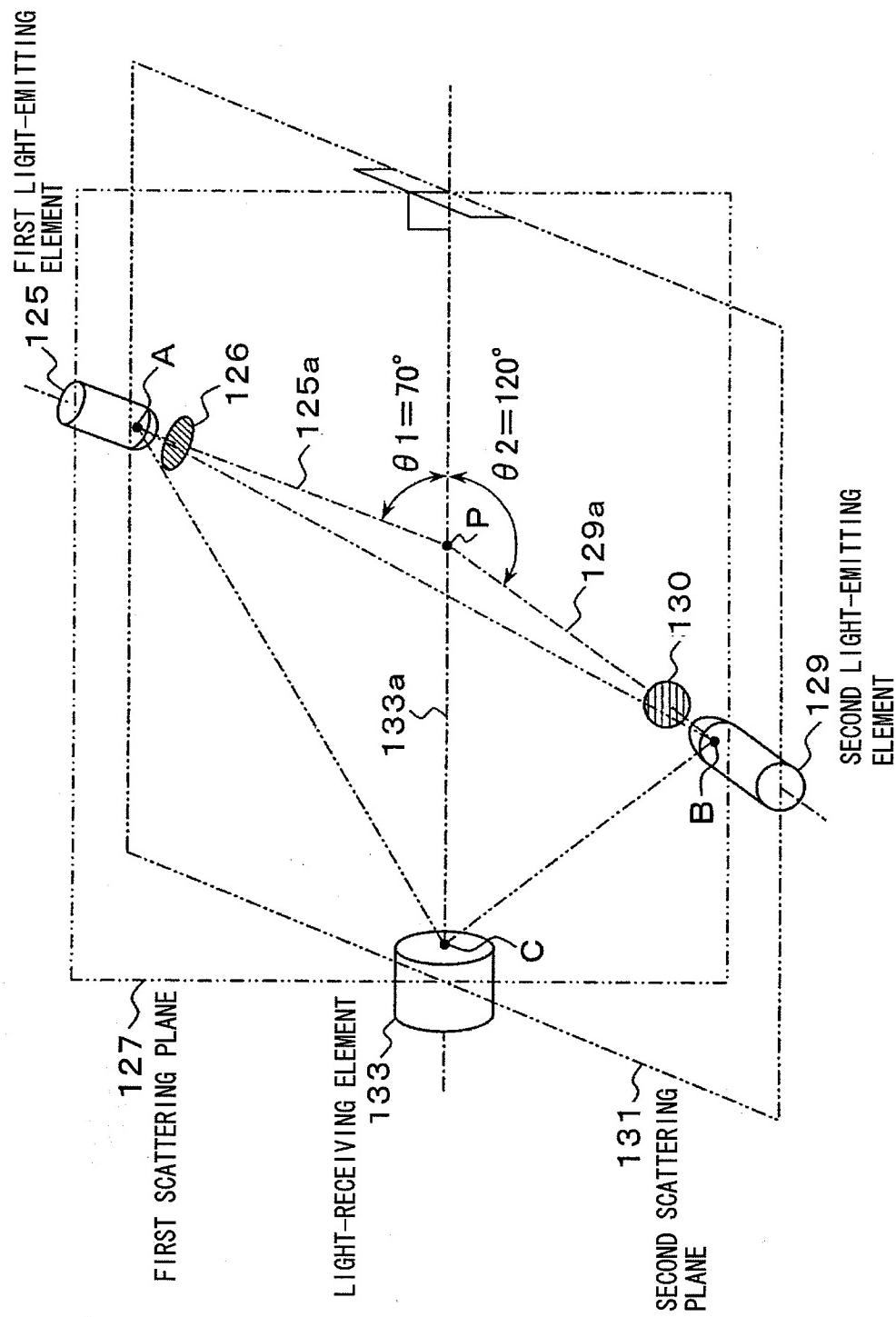
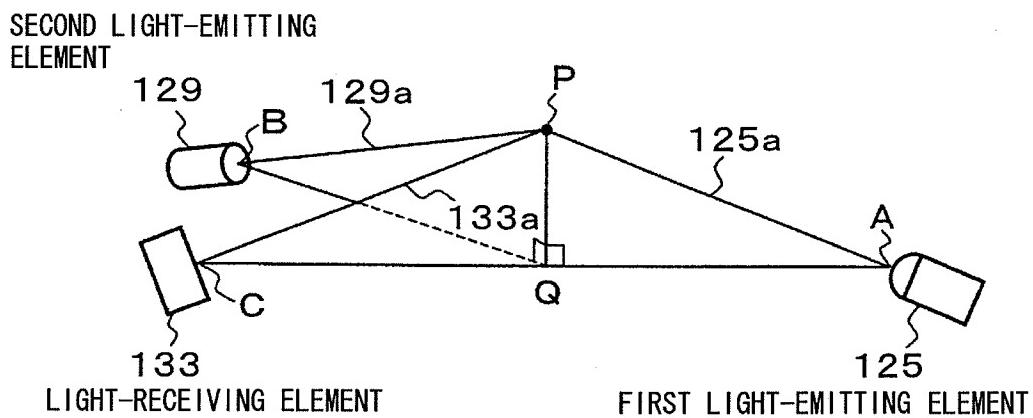
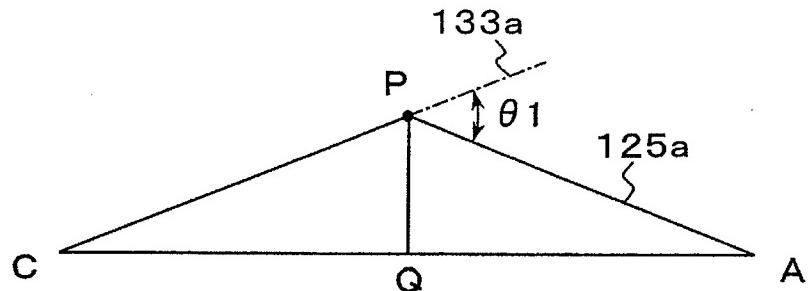


FIG. 32 A



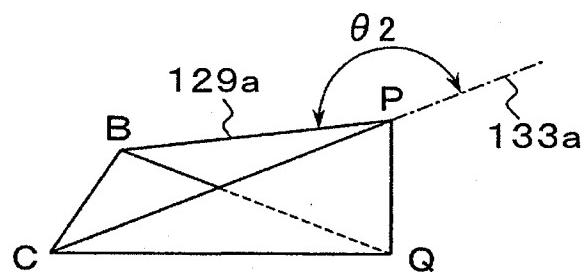
5

FIG. 32 B



10

FIG. 32 C



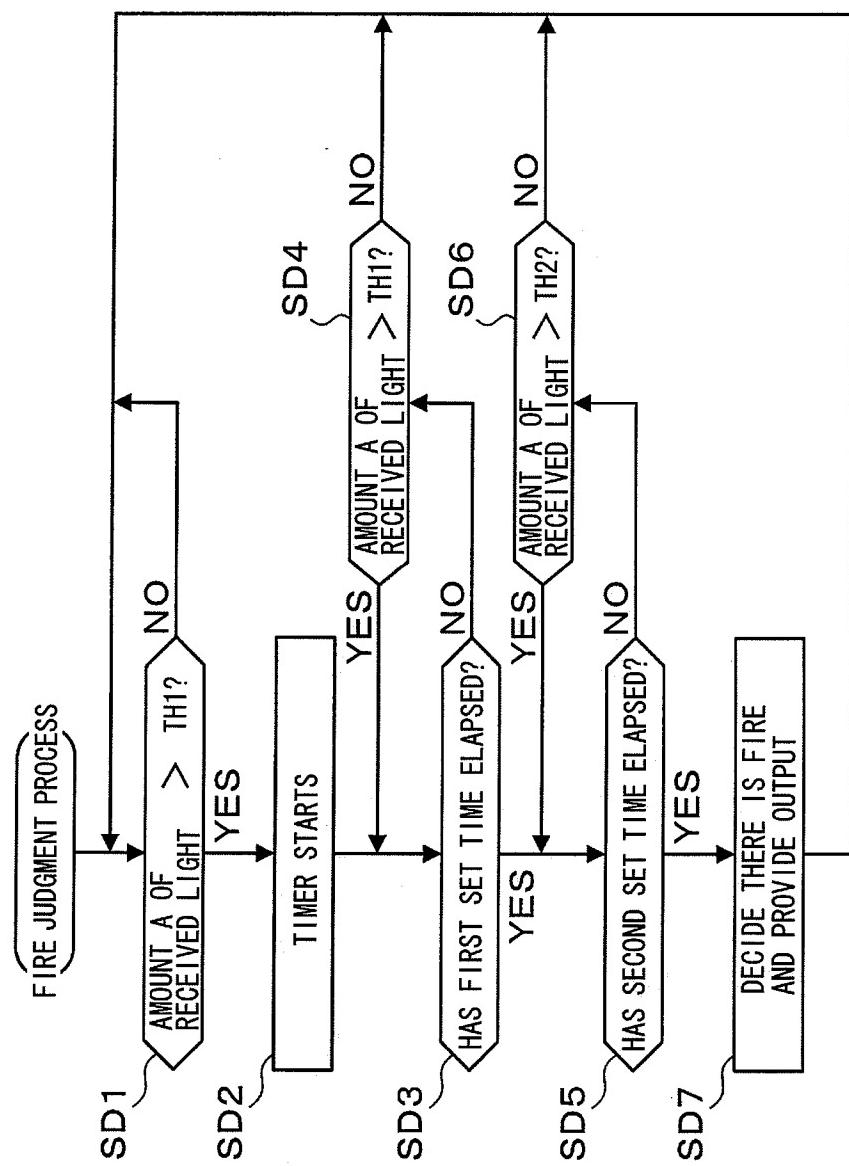
T I G . 3 3

SCATTERING ANGLE	70°	90°	90°	120°
POLARIZATION ANGLE ϕ	0°(HORIZONTAL)	90°(VERTICAL)	0°(HORIZONTAL)	90°(VERTICAL)
PAPER FILTER	130	200	60	115
KEROSENE	20	56	18	47
TOBACCO	80	280	20	190
			17	105

F I G . 3 4

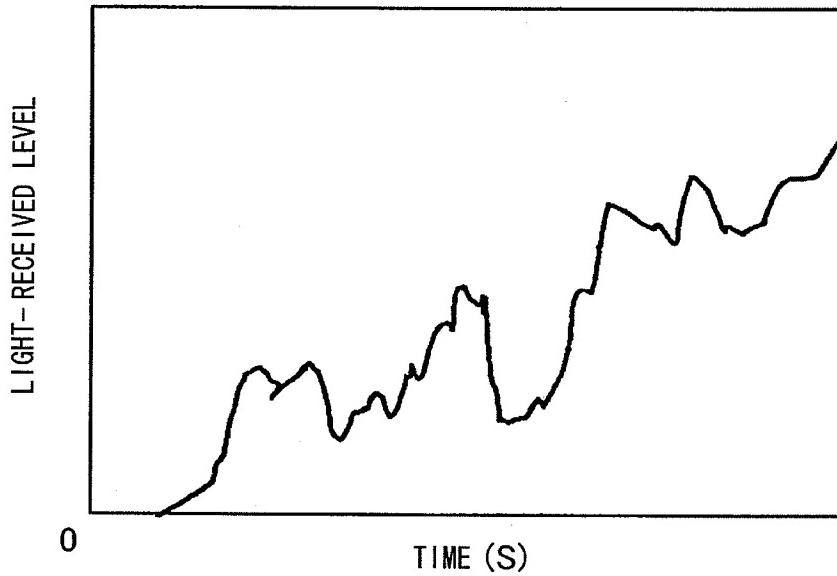
TYPE OF COMBUSTION MATERIALS	AMOUNT A1 OF LIGHT- RECEIVED SIGNAL FOR FIRST LIGHT-EMITTING ELEMENT	AMOUNT A2 OF LIGHT- RECEIVED SIGNAL FOR SECOND LIGHT-EMITTING ELEMENT	RATIO R=A1 /A2
PAPER FILTER	200	45	4.44
KEROSENE	56	10	5.60
TOBACCO	280	17	16.47

F I G . 3 5



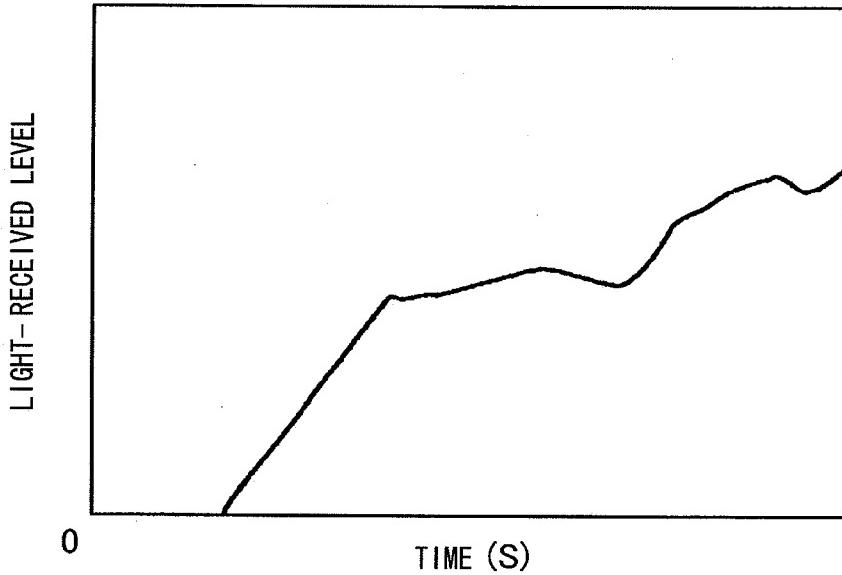
35/36

F I G . 3 6

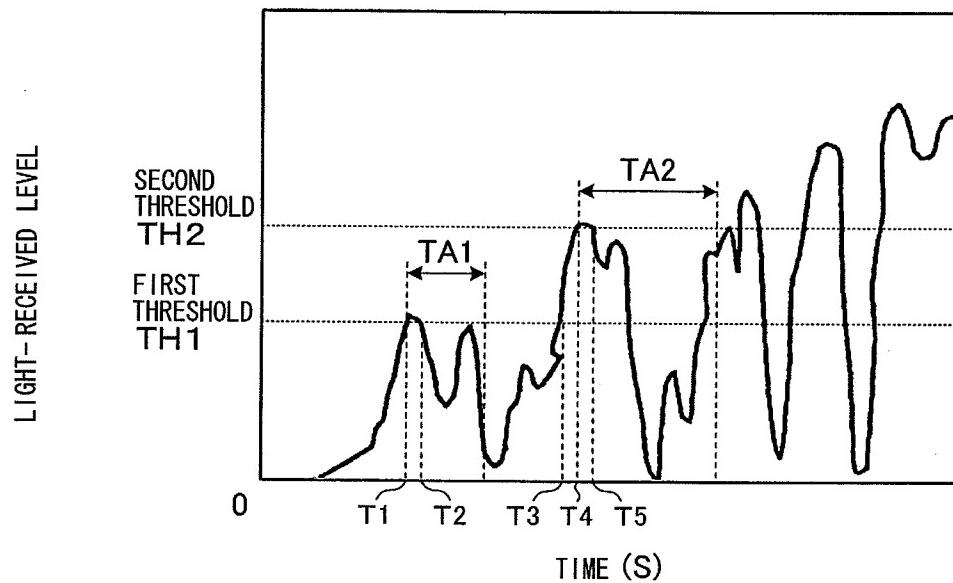


5

F I G . 3 7



F I G . 3 8



5

F I G . 3 9

